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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,665	07/15/2003	Sung-Jae Moon	YOM-0038	7173

7590 01/23/2007
DAVID A. FOX
55 Griffin South Road
Bloomfield, CT 06002

EXAMINER

DUDEK, JAMES A

ART UNIT	PAPER NUMBER
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2871

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/23/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/619,665

Applicant(s)

MOON, SUNG-JAE

Examiner

James A. Dudek

Art Unit

2871

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 7 and 10-12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by US 6392719 B2 (719).

Per claim 1, 719 teaches the liquid crystal display comprising: TFT array [shown in figures 1, 3 and 5] including a plurality of first display signal lines [gate lines], a plurality of second display signal lines crossing the first display signal lines [data lines], a plurality of switching elements connected to the first display signal lines and the second display signal lines [transistors at the cross points of the gate and data lines], a plurality of pixel electrodes connected to the switching elements [see capacitor coupled to the transistor], and an inspection line formed on the TFT array panel for receiving the test signals to the second display signal lines [see lines 5-8] wherein the inspection line is separated from the first and second display signal lines, the switching elements, and the pixel electrodes [see lines 6-8 in figure 4, the lines are separated by the space shown in the figure and connected via the through holes], the at least one inspection line includes a test pad [see the pads at the end of lines 4-8 shown in figure 1, 3 and 5] for receiving an externally applied test signal [see column 2, 2nd full paragraph], and the test pad is formed at a position where an external device is attached to the liquid crystal panel.

Per claim 2, 719 teaches the liquid crystal display of claim 1, wherein the at least one inspection line comprises at least two inspection lines, and the second display signal lines are alternately connected to the at least two inspection lines [see 6-8 and the alternating connection shown in figure 3].

Per claim 3, 719 teaches the liquid crystal display of claim 1, further comprising a plurality of drivers connected to the second display signal lines [see bundle pads 10, these are the drivers or where the drivers are placed].

Per claim 7, 719 teaches the liquid crystal display of claim 3, wherein the test pad is disposed between the driver and an edge of the liquid crystal panel [inherent since the pads and drivers are formed on the substrate].

Per claim 10, 719 teaches the liquid crystal display of claim 1, wherein the at least inspection line and the second display signal line are electrically separated [see the second paragraph in column two, the shorting bars are removed by scribing thus they are separated].

Per claims 11-12, 719 teaches the liquid crystal display of claim 10, further comprising a connecting member including the same layer as the pixel electrodes, wherein the connecting member is connected to at least one of the at least one inspection line and the second display signal line [see column 4, 3rd full paragraph]

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-6 and 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over 719 in view of US 6424400 B1 (400).

Per claim 4-6 and 8-9, 719 teaches the liquid crystal display of claim 3, but lacks a plurality of straight connecting lines interconnecting chip drivers [see line 13] wherein the test pad is closer to an edge of the liquid crystal panel than to the connecting lines and a plurality of flexible printed circuit films attached to the liquid crystal panel, wherein the external devices are the flexible printed circuit films. However, 400 teaches each of these limitations as shown in figure 8 with chip drivers 3, tabs 11 and extending lines 10. 400 teaches that liquid crystal cells benefit from this structure with increased image quality. See column 2, 8th paragraph. *Accordingly, it would have been obvious to one of ordinary skill at the time of invention to combine the chip extending lines and tabs of 400 with 719 to improve image quality.*

Art Unit: 2871

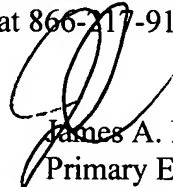
Response to Arguments

Any arguments are moot due to new grounds of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James A. Dudek whose telephone number is 571-272-2290. The examiner can normally be reached on 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on 571-272-1787. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


James A. Dudek
Primary Examiner
Art Unit 2871